

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

REARDEN LLC, et al.,
Plaintiffs,

v.

TWDC ENTERPRISES 18 CORP., et al.,
Defendants.

Case No. [22-cv-02464-JST](#)

**ORDER GRANTING-IN-PART AND
DENYING-IN-PART MOTION TO
DISMISS THIRD AMENDED
COMPLAINT**

Re: ECF No. 68

Before the Court is Defendants TWDC Enterprises 18 Corp. f/k/a The Walt Disney Company, Disney Content Services Co., Inc. d/b/a Disney Pictures Productions, LLC; Walt Disney Pictures; Marvel Studios, LLC; MVL Film Finance LLC; Lucasfilm Ltd. LLC; and Disney Studio Production Services Co., LLC's (collectively, "Disney") motion to dismiss Plaintiffs Rearden LLC and Rearden MOVA LLC's (collectively, "Rearden") Third Amended Complaint. ECF No. 68. The Court will grant the motion in part and deny it in part.

I. BACKGROUND

The factual and procedural background of this case is summarized in greater detail in this Court's prior order. ECF No. 54 at 1–3. This case is the latest in a longstanding controversy regarding ownership and use of the MOVA Contour Reality Capture program ("MOVA"), which is used to capture high-resolution 3D models of a performer's face and facial movements, in order to create facial animations for use in the production of movies. ECF No. 64 ("TAC") ¶¶ 28, 36. This Court initially adjudicated a dispute between Plaintiff Rearden LLC and Shenzhenshi Haitiecheng Science and Technology Company ("SHST") concerning the ownership of equipment and intellectual property associated with MOVA ("Ownership Litigation"). *Shenzhenshi Haitiecheng Sci. and Tech. Co., LTD v. Rearden LLC ("SHST")*, No. 15-cv-00797-JST, 2017 WL

3446585, at *1 (N.D. Cal. Aug. 11, 2017), *aff'd*, 823 F. App'x 455 (9th Cir. 2020). SHST is a Chinese entity associated with Digital Domain 3.0, Inc. (“DD3”), a visual effects company whose alleged conduct lies at the heart of the case at hand. In the Ownership Litigation, the Court issued a preliminary injunction prohibiting the sale, use, movement, concealment, transfer, or disposal of MOVA Assets by SHST or Virtual Global Holdings Limited (“VGH”) – an entity related to DD3 and SHST. *See Virtue Glob. Holdings Ltd. v. Rearden LLC*, No. 15-cv-00797-JST, 2016 WL 9045855, at *2, *10 (N.D. Cal. June 17, 2016). After a bench trial, the Court dissolved the injunction and ruled that “Rearden, not . . . DD3, owns and at all relevant times has owned the MOVA Assets.” *SHST*, 2017 WL 3446585, at *9. The Court further ordered the return of the assets to Rearden, which included “MOVA Software, Source code, and Output files.” Order Regarding the Return of MOVA Assets 1, *SHST*, No. 15-cv-00797-JST (N.D. Cal. Oct. 2, 2017), ECF No. 449.

In this case, Rearden brings claims of copyright and patent infringement. First, Rearden alleges that Disney contracted with DD3 for facial performance capture services and output works for the films *Avengers: Infinity War* and *Avengers: Endgame*, and that following the issuance of the preliminary injunction in the Ownership Litigation, DD3 performed these services using MOVA, including animating the CG characters Thanos, Ebony Maw, and the Hulk. *See TAC* ¶¶ 69–85. It alleges that Disney is accordingly liable for vicarious and contributory copyright infringement. *Id.* Second, Rearden alleges that Disney’s MEDUSA and ANYMA facial capture systems infringe upon four of Rearden’s MOVA-related patents: U.S. Patent Nos. 10,825,226 (“’226 Patent”), 11,004,248 (“’248 Patent”), 11,024,072 (“’072 Patent”), and 11,030,790 (“’790 Patent”) (collectively, the “Asserted Patents”). *See id.* ¶¶ 86–197.

Previously, the Court granted Disney’s motion to dismiss Rearden’s Second Amended Complaint (“SAC”). ECF No. 54. In that order, the Court found that the SAC failed to adequately plead a plausible claim for copyright infringement because “[s]tripped of its conclusory allegations, the [SAC] fails to allege that DD3 performed facial capture shoots using the MOVA system.” *Id.* at 7. The Court also dismissed the patent infringement claims, finding that the Asserted Patents were directed to patent-ineligible abstract ideas under 35 U.S.C. § 101. *See id.* at

7–15. The Court granted Rearden leave to amend the SAC to cure the deficiencies identified in that order, *see id.* at 16, and Rearden filed its TAC on May 24, 2023. ECF No. 64. Disney now moves to dismiss Rearden’s TAC on the same grounds as asserted in its prior motion. ECF No. 68 (“Mot.”).

II. LEGAL STANDARD

To survive a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6), a complaint must contain “a short and plain statement of the claim showing that the pleader is entitled to relief.” Fed. R. Civ. P. 8(a)(2). Dismissal “is appropriate only where the complaint lacks a cognizable legal theory or sufficient facts to support a cognizable legal theory.” *Mendiondo v. Centinela Hosp. Med. Ctr.*, 521 F.3d 1097, 1104 (9th Cir. 2008). “[A] complaint must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). Factual allegations need not be detailed, but the facts must be “enough to raise a right to relief above the speculative level.” *Twombly*, 550 U.S. at 555.

“A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft*, 556 U.S. at 678. While this standard is not “akin to a ‘probability requirement’ . . . it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Id.* (quoting *Twombly*, 550 U.S. at 556). “Where a complaint pleads facts that are ‘merely consistent with’ a defendant’s liability, it ‘stops short of the line between possibility and plausibility of entitlement to relief.’” *Id.* (quoting *Twombly*, 550 U.S. at 557).

In determining whether a plaintiff has met the plausibility requirement, a court must “accept all factual allegations in the complaint as true and construe the pleadings in the light most favorable” to the plaintiff. *Knievel v. ESPN*, 393 F.3d 1068, 1072 (9th Cir. 2005). In so doing, “a court may not look beyond the complaint to a plaintiff’s moving papers, such as a memorandum in opposition to a defendant’s motion to dismiss.” *Schneider v. California Dep’t of Corr.*, 151 F.3d 1194, 1197 n.1 (9th Cir. 1998) (emphasis omitted). However, the Court “may . . . consider unattached evidence on which the complaint ‘necessarily relies’ if: (1) the complaint refers to the

document; (2) the document is central to the plaintiff's claim; and (3) no party questions the authenticity of the document.” *United States v. Corinthian Colleges*, 655 F.3d 984, 999 (9th Cir. 2011) (quoting *Marder v. Lopez*, 450 F.3d 445, 448 (9th Cir. 2006)). Finally, a plaintiff may “plead[] facts alleged upon information and belief where the facts are peculiarly within the possession and control of the defendant or where the belief is based on factual information that makes the inference of culpability plausible.” *Soo Park v. Thompson*, 851 F.3d 910, 928 (9th Cir. 2017) (quoting *Arista Records, LLC v. Doe 3*, 603 F.3d 110, 120 (2d Cir. 2010)).

III. DISCUSSION

A. Copyright Infringement

The Court begins with Rearden’s claim for copyright infringement. The Court previously found that the SAC failed to plausibly allege “that DD3 used the MOVA software to create output files,” as “stripped of its conclusory allegations, the [SAC] fails to allege that DD3 performed facial capture shoots using the MOVA system.” ECF No. 54 at 6–7. Because direct copyright infringement by DD3 is a necessary element for Rearden’s secondary copyright infringement claim against Disney, *see, e.g., VHT, Inc. v. Zillow Grp., Inc.*, 918 F.3d 723, 731 (9th Cir. 2019), the Court found this deficiency fatal and dismissed Rearden’s secondary infringement claim on that ground. *See* ECF No. 54 at 7. The question now before the Court is whether the amendments reflected in Rearden’s TAC cure that deficiency. The Court finds they do not.

Rearden’s amendments to the TAC relate to two new pieces of evidence obtained from DD3: first, Rearden alleges that it has identified a Maya¹ file returned by DD3 which contained a capture of Mark Ruffalo, the actor who played the Hulk in *Avengers: Infinity War* and *Avengers: Endgame* (the “Ruffalo Maya File”). Rearden alleges that the Ruffalo Maya File “contain[s] substantial amounts of copied Mova source code covered by Rearden’s copyright in the Mova

¹ “Maya is a widely used computer graphics program developed and sold by Autodesk. A .ma file, or Maya animation file, is a plain text project file that contains art asset data, along with commands and/or scripts. A .ma file is typically created, edited, and executed in connection with the production of 3D graphics content.” *Rearden LLC v. Walt Disney Co.*, No. 17-CV-04006-JST, 2023 WL 7185737, at *1 (N.D. Cal. Sept. 8, 2023) (citation and quotation omitted).

software.” TAC ¶ 52. Second, Rearden alleges that it has identified a screenshot of another Maya file returned by DD3 for the character Ebony Maw, who appeared only in *Avengers: Infinity War* and *Avengers: Endgame* (the “Ebony Maw Screenshot”). Rearden alleges that the Ebony Maw Screenshot shows “source code that, on information and belief, was at minimum created by and may include source code from the Mova Contour program, as it includes identical elements and identical naming conventions for objects such as ‘mova_cache_md’, ‘mova_originalHeadMotion’, and ‘mova_cache_publish_set.’” *Id.* ¶ 55. Based on these additional allegations, Rearden argues that it has now pled a plausible case that DD3 used the MOVA software to create output files, that “DD3 copied MOVA source code into its output files,” ECF No. 72 (“Opp.”) at 9 (emphasis in original), and that “together with the previously pleaded facts concerning Thanos files with the ‘mova’ name in them, . . . it is not just plausible but probable that MOVA was broadly used in the creation of *Infinity War* and *Endgame*.” *Id.* at 10.

These amendments are insufficient to cure the deficiencies in Rearden’s copyright claim. Starting with the Ruffalo Maya File, the Court takes as true Rearden’s well-pled allegation that the file contains “substantial amounts of copied Mova source code covered by Rearden’s copyright in the Mova software.” TAC ¶ 52; *Knivel*, 393 F.3d at 1072. However, the Court disregards as legally insufficient Rearden’s subsequent allegation that “[o]n information and belief, based on the date of creation of the Ruffalo Maya File and other indications of its purpose, the Ruffalo Maya File was used to animate The Hulk in at least one of *Avengers: Infinity War* and *Avengers: Endgame*.” TAC ¶ 53. While a plaintiff is entitled to plead facts alleged upon information and belief “where the facts are peculiarly within the possession and control of the defendant or where the belief is based on factual information that makes the inference of culpability plausible.” *Soo Park*, 851 F.3d at 928 (internal quotation omitted), neither is true of Rearden’s allegation here. The Ruffalo Maya File is in Rearden’s possession and control, yet Rearden never identifies what the purported “date of creation” or “other indications . . . of purpose” are.² Instead, Rearden asks

² Rearden, in its opposition, identifies for the first time a creation date of September 2016. Opp. at 5. But that date seemingly conflicts with its own later representations that the “last modified” date of the file was sometime in August or September 2016. See Opp. at 8; Mot. at 14; ECF No. 68-7. Ultimately, the Court need not resolve inconsistency, as allegations not contained in the complaint

the Court to speculate as to what this “date of creation” is, what the “other indications of . . . purpose” are, and why these factors would support a plausible inference that the Ruffalo Maya file was used in *Avengers: Infinity War* or *Avengers: Endgame*. Such a conclusory allegation, “made only on information and belief and without supporting factual allegations, is a ‘naked assertion[] devoid of further factual enhancement,’ and is therefore insufficient.” *Marcus v. Nationstar Mortg. LLC*, No. 19-56288, 2022 WL 1486831, at *1 (9th Cir. May 11, 2022) (quoting *Iqbal*, 556 U.S. at 678); *see also DCR Workforce, Inc. v. Coupa Software, Inc.*, No. 21-16903, 2022 WL 17101148, at *2 (9th Cir. Nov. 22, 2022) (dismissing conclusory allegations pled “on information and belief” where plaintiff possessed actual knowledge). And without this conclusory allegation, Rearden’s remaining allegations regarding the content of the Ruffalo Maya File, even if taken as true, do not sufficiently support a plausible inference that DD3 operated MOVA or copied MOVA source code into output files such that MOVA was “broadly used in the creation of *Infinity War* and *Endgame*.” Opp. at 10.

The Court next turns to Rearden’s new allegations regarding the Ebony Maw Screenshot. Rearden alleges that the Ebony Maw Screenshot shows a Maya file that was used to animate the character Ebony Maw, who appears exclusively in *Avengers: Infinity War* and *Avengers: Endgame*. TAC ¶ 54. According to Rearden, the Ebony Maw Screenshot shows a Maya file that includes “source code that, on information and belief, was at minimum created by and may include source code from the Mova Contour program, as it includes identical elements and identical naming conventions for objects such as ‘mova_cache_md’, ‘mova_originalHeadMotion’, and ‘mova_cache_publish_set.’” *Id.* ¶ 55. Finally, Rearden alleges that, because DD3 represented the Ebony Maw Screenshot shows a Maya file created by DD3’s Masquerade software, “the Masquerade software included substantial amounts of copied Mova source code such that the Masquerade software constitutes either an unauthorized copy of the stolen and copyrighted Mova software or an unauthorized derivative work using the stolen and copyrighted Mova software.” *Id.* ¶ 57.

may not be considered on a Rule 12(b)(6) motion to dismiss. *See Schneider*, 151 F.3d at 1197.

The Court finds Rearden’s allegations relating to the Ebony Maw Screenshot insufficient to support a plausible inference of culpability. Rearden alleges “on information and belief” that the Ebony Maw Screenshot shows a Maya file containing MOVA source code, but that allegation is contradicted by the actual screenshot, which, on its face, shows no source code at all.³ Instead, it shows a Maya file opened in the AutoDesk Maya program, in which certain objects in the file are named using MOVA naming conventions. Because such allegations are contradicted by evidence incorporated into the TAC, the Court need not accept them as true. *See Sprewell v. Golden State Warriors*, 266 F.3d 979, 988 (9th Cir. 2001), *opinion amended on denial of reh’g*, 275 F.3d 1187 (9th Cir. 2001). As to Rearden’s remaining allegations regarding naming conventions, the Court previously held that allegations that file or folder names containing the word “mova” are insufficient to support a plausible inference that the files “actually contain copies, or reflect the copying, of MOVA software.” ECF No. 54 at 6. The same continues to be true here. Allegations that a Maya file of the Ebony Maw character used the word “mova” in its naming conventions, without more, is insufficient to establish a reasonable inference that the file itself contained MOVA source code, or that DD3’s Masquerade software copied “substantial amounts” of MOVA source code.

Because Rearden’s new allegations regarding the Ruffalo Maya File and Ebony Maw Screenshot are insufficient to raise its allegations of DD3’s direct copyright infringement beyond a speculative level, the Court cannot draw a plausible inference of culpability as to its secondary copyright infringement claims against Disney. The Court therefore grants Disney’s motion to dismiss as to the TAC’s copyright infringement claim.

B. Patent Infringement

The Court next turns to Rearden’s claims for patent infringement. Previously, the Court

³ Rearden did not attach the actual Ebony Maw Screenshot to the TAC. Disney in its supporting papers, attaches an exhibit that it represents as the Ebony Maw Screenshot, and asks the Court to consider it as incorporated by reference. *See* Mot. at 15 n.5; ECF No. 67-6. Rearden does not dispute the authenticity of the exhibit, nor contend that it is not representative of the Ebony Maw Screenshot. Accordingly, and because the Ebony Maw screenshot is regularly referenced by and central to Rearden’s copyright claim, the Court considers it incorporated by reference for the purposes of this motion. *See Corinthian Colleges*, 655 F.3d at 999.

found the Asserted Patents were invalid under the Supreme Court’s two-step patent eligibility inquiry, which asks the Court to first “determine whether the claims at issue are directed to [a] patent-ineligible concept[]” and if so, “to then consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). At step one, the Court found that the Asserted Patents’ representative claims⁴ “fail to recite specific means of implementing the abstract concept of markerless facial motion capture” and are therefore directed to patent-ineligible abstract ideas. ECF No. 54 at 14. At step two, the Court found that “[b]ecause each claim ‘contains no restriction on how the result is accomplished . . . [and] [t]he mechanism . . . is not described, although this is stated to be the essential innovation[,]’ the claims fail to recite an inventive concept and are not patent-eligible.” *Id.* at 15 (alterations in original) (quoting *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016)).

Rearden argues that the amendments reflected in the TAC compel a different result. Specifically, Rearden’s amendments add allegations that the claim terms “correlate”/“correlated” and “track”/“automatically track” in the Asserted Patents, and “correspond to similar facial expressions of a performer’s face from a second facial performance” in the ’226 Patent, should be construed as limited to, and requiring the use of, specific methods disclosed in the Asserted Patents’ shared specification. *See* TAC ¶¶ 89–94; 120–124; 143–147; 172–176. Rearden argues that these proposed constructions must be accepted on a motion to dismiss, and that “[t]aken as true, these factual allegations show that the patents-in-suit are not directed to unpatentable abstract ideas[.]” *Opp.* at 15.

Because a “determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter[,]” the Federal Circuit has stated that “it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 [patent

⁴ The Court treats as representative claim 1 of the ’226 Patent, claim 1 of the ’248 Patent, claim 9 of the ’072 Patent, and claim 9 of the ’790 Patent, for the same reasons described in its prior order. *See* ECF No. 54 at 9.

eligibility] analysis[.]” *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273–74 (Fed. Cir. 2012); *see also MyMail, Ltd. v. ooVoo, LLC*, 934 F.3d 1373, 1379 (Fed. Cir. 2019). However, it is also the case that “claim construction is not an inviolable prerequisite to a validity determination under § 101” because “[i]f claims are directed to ineligible (or eligible) subject matter under all plausible constructions, then the court need not engage in claim construction before resolving a Section 101 motion.” *Sanderling Mgmt. Ltd. v. Snap Inc.*, 65 F.4th 698, 704 (Fed. Cir. 2023) (internal quotation omitted). Therefore, “[i]n aid of determining whether a particular motion requires claim construction before disposition of the motion, a district court is free to require the party asking for construction to provide an actual proposed construction, to demonstrate that its construction is not frivolous, and to articulate how adoption of the construction would materially impact the analysis at step one (and/or at step two).” *Id.* If the non-moving party succeeds in demonstrating the existence of a plausible claim construction dispute, “the court must proceed by adopting the non-moving party’s constructions . . . or resolve the disputes to whatever extent is needed to conduct the § 101 analysis, which may well be less than a full, formal claim construction.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018) (internal citation omitted); *see also MyMail*, 934 F.3d at 1379.

Because Rearden has alleged proposed constructions in the TAC, the Court is entitled to determine whether the proposed constructions are frivolous, and if the constructions are nonfrivolous, whether their adoption would materially change the patent eligibility analysis. The Court is aware of no case that has considered what a frivolous claim construction would be in the context of a motion to dismiss for patent eligibility, but since claim construction is a question of law for the Court to resolve, any proposed construction “is subject to Rule 11(b)(2)’s requirement that all legal arguments be nonfrivolous.” *Raylon, LLC v. Complus Data Innovations, Inc.*, 700 F.3d 1361, 1368 (Fed. Cir. 2012). Because “[r]easonable minds can differ as to claim construction positions and losing constructions can nevertheless be nonfrivolous,” a frivolous claim construction position is one that is “so unreasonable that no reasonable litigant could believe it would succeed[.]” *Id.* (internal quotation omitted).

1 **1. “correlate”/“correlated”**

2 Rearden proposes that the terms “correlate” and/or “correlated” in the Asserted Patents be
3 construed to:

4 require use of a pixel-wise cross-correlation algorithm for
5 determining the 3D location of points on the performer’s face by
6 correlating a plurality of 2D frames from a plurality of cameras at the
7 same time interval, as set forth in the flowchart of Figure 15 of the
’226 Patent with its use described in detail at col. 11:25-17:4, together
with the alternate embodiments for adjusting the values within the
correlation algorithm described at col. 17:5-18 and the alternate
correlation embodiments detailed at 17:19-20:31.

8 Opp. at 15–16 (quoting TAC ¶¶ 89, 120, 143, 172). Rearden argues that this “specialized
9 meaning” of the terms “is supported throughout the patent-in-suit’s specifications.” Opp. at 16.
10 Essentially, Rearden argues that the patentee acted as its own lexicographer, by setting forth “ a
11 special definition . . . that differs from the meaning it would otherwise possess.” *Philips v. AWH*
12 *Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005).

13 It is “a basic principle of claim construction . . . that ‘the words of a claim are generally
14 given their ordinary and customary meaning.’” *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753
15 F.3d 1291, 1299 (Fed. Cir. 2014) (quoting *Philips*, 415 F.3d at 1312). Because the claims “do not
16 stand alone,” they “must be read in view of the specification, of which they are a part.” *Philips*,
17 415 F.3d at 1315 (internal quotation omitted). Thus, the ordinary and customary meaning of a
18 claim term is “not the meaning of the term in the abstract,” but rather “its meaning to the ordinary
19 artisan after reading the entire patent.” *Id.* at 1321; *see also Bradium Techs. LLC v. Iancu*, 923
20 F.3d 1032, 1042 (Fed. Cir. 2019) (“Claim construction seeks to ascribe to claim terms the meaning
21 a person of ordinary skill in the art at the time of invention would have given them.”); *Trustees of*
22 *Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1362 (Fed. Cir. 2016)
23 (“Claim construction requires a determination as to how a person of ordinary skill in the art would
24 understand a claim term in the context of the entire patent, including the specification.” (internal
25 quotation omitted)). The specification “is always highly relevant to the claim construction
26 analysis” and usually, “it is the single best guide to the meaning of a disputed term.” *Phillips*, 415
27 F.3d at 1315 (internal quotation omitted). In particular, the specification “may reveal a special
28

definition given to a claim term by the patentee that differs from the meaning it would otherwise possess” or “an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Id.* at 1316.

Rearden argues that the Asserted Patents set forth a “specialized meaning” of the term “correlate.” A patentee seeking to be its own lexicographer “must clearly express that intent in the written description” with “sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine the claim term.” *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005). This intent need not be expressed as a formal redefinition, as the “specification may define terms ‘by implication’ such that the meaning may be found in or ascertained by a reading of the patent documents.” *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001) (internal quotation omitted). However, “[i]t is not enough for a patentee to simply disclose a single embodiment or use a word in the same manner in all embodiments, the patentee must ‘clearly express an intent’ to redefine the term.” *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012); *accord Bradium*, 923 F.3d at 1044. However, “when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term ‘by implication.’” *Bell Atl.*, 262 F.3d at 1271; *see also In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1150 (Fed. Cir. 2012) (claim term may be defined by implication where patents “repeatedly, consistently, and exclusively” depict embodiments using that definition).

The Court finds that there is sufficient support in the specification for Rearden’s proposed construction such that it is not “so unreasonable that no reasonable litigant could believe it would succeed[.]” *Raylon*, 700 F.3d at 1368 (internal quotation omitted). Columns 11:27–17:4 and Figure 15 of the specification disclose a specific pixel-wise cross-correlation algorithm that is described as “one specific embodiment of a method for correlating two frame captures.” ’226 Patent at 11:47–49.⁵ The specification then goes on to disclose a broader genus of such methods, which are described as variations using the algorithm disclosed in Figure 15 as a “guideline” with modifications to certain variables. *Id.* at 17:5–17. Notably, all such methods are described as

⁵ Because the Asserted Patents share a specification, the Court refers to the ’226 Patent for consistency with the parties’ briefing. *See* Opp. at 16 n.4.

1 involving pixel-wise cross-correlations, *id.* at 17:15–17, and aside from these disclosures, the
2 specification describes no other method of “correlating” data.

3 Additionally, every reference to “correlating” or “correlation” in the specification either
4 expressly references, or is consistent with only such a pixel-wise cross correlation method. For
5 example, the specification regularly describes “correlation values” which would suggest use of a
6 mathematical algorithm, and is inconsistent with the ordinary meaning of “correlation” as used in
7 common parlance. Similarly, the specification regularly refers to “correlating” frames or data
8 streams captured from cameras using a data processing system (*see, e.g.*, ’226 Patent at 8:28–35)
9 or describes correlations done at various “resolutions” (*see id.* at 18:32–40), which again at least
10 suggests use of a software algorithm. In contrast, when describing processes done manually by
11 eye, the specification uses different terminology. *See id.* at 18:16–18 (“A user would be able to see
12 with the naked eye that regions 1602, 1604, and 1606 *correspond* to regions 1612, 1614, and
13 1616, respectively.” (emphasis added)). Because the specification arguably “repeatedly,
14 consistently, and exclusively” refers to a pixel-wise cross-correlation algorithm when it uses the
15 term “correlate,” it would not be unreasonable to argue that the term should be construed to
16 require the use of such an algorithm. *See Abbott*, 696 F.3d at 1149–50 (construing
17 “electrochemical sensor” as not having external wires or cables because the patents “repeatedly,
18 consistently, and exclusively depict an electrochemical sensor without external cables or wires
19 while simultaneously disparaging sensors with external cables or wires.” (internal quotation
20 omitted)). Therefore, the Court concludes that Rearden’s proposed construction is not frivolous.⁶

21 The Court next considers “how adoption of [Rearden’s proposed] construction would
22 materially impact the analysis at step one (and/or at step two).” *Sanderling*, 65 F.4th at 704. The
23 Court finds that here, adoption of Rearden’s proposed construction would render the claims
24 patent-eligible. In its prior order, the Court reasoned that the Asserted Patents’ representative
25 claims were directed to abstract ideas because “the steps of the representative claims of the patents
26 at hand lack any limitations that incorporate particular information or feature specific techniques”
27

28 ⁶ In reaching this conclusion, the Court determines only that the construction is not frivolous, and
expresses no view at this time whether the construction is correct.

and “ ‘merely invoke generic processes’ such as communicating, tracking, and creating.” ECF No. 54 at 13, 14 (quoting *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016)). However, if the Court were to adopt Rearden’s proposed construction, the representative claims would instead incorporate particular information or feature specific techniques in the form of specific pixel-wise cross-correlation algorithms, as opposed to the generic concept of “correlation” in the abstract. In such a case, the representative claims would be analogous to those found patent-eligible in *McRO*, where the Federal Circuit reasoned that by incorporating a specific genus of rules, the representative claim “is limited to a specific process for automatically animating characters using particular information and techniques and does not preempt approaches that use rules of a different structure or different techniques.” *Id.* at 1316. Here too, if limited to a specific genus of algorithms for pixel-wise cross-correlation, the representative claims would focus on “a specific means or method that improves the relevant technology” of 3D facial capture, and not the “result or effect that itself is the abstract idea” such that it would preempt the entire field. *Id.* at 1314, *see also Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1150 (Fed. Cir. 2019) (holding claims were not abstract because they “recit[ed] a specific implementation of the varying way that check data is generated that improves the ability of prior art error detection systems to detect systematic errors”); *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1348 (Fed. Cir. 2018) (holding claim was not abstract because it “specifically identifie[d] how [a] functionality improvement is effectuated”); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018) (holding claims were not abstract because they recited a “specific structure . . . that performs a specific function”).

Disney’s counterarguments fail to persuade. First, Disney argues that even crediting Rearden’s proposed construction, the specification makes clear that the pixel-wise cross-correlation algorithms it described are well-known in the art. Mot. at 24. Rearden counters that, according to the specification, these algorithms were only well-known in the field of astronomy, and the Asserted Patents’ application of these algorithms to the field of facial motion capture was novel and inventive. Opp. at 21. This dispute is not one of patent eligibility, but rather novelty and/or anticipation, and therefore cannot be resolved on a motion to dismiss. *See CardioNet, LLC*

1 *v. InfoBionic, Inc.*, 955 F.3d 1358, 1373 (Fed. Cir. 2020) (“The § 101 patent-eligibility inquiry is
 2 only a threshold test, and we reserve for §§ 102 and 103 purposes our comparison of the prior art
 3 and the claims to determine if the claims are, in fact, an improvement over the prior art.” (citation
 4 and quotation omitted)). It is well established that “applications” of patent-ineligible abstract
 5 ideas to solve specific technological problems are entitled to patent protection. *See Alice*, 573
 6 U.S. at 217; *Diehr*, 450 U.S. at 178 (finding patent-eligible application of “well-known”
 7 mathematical equation to solve a technological problem in rubber manufacturing). That the pixel-
 8 wise cross-correlation algorithms disclosed in the Asserted Patents may have been well-known
 9 does not change the character of the claims for the purposes of patent eligibility. *See Parker v.*
 10 *Flook*, 437 U.S. 584, 591–92 (1978) (“The novelty of the mathematical algorithm is not a
 11 determining factor at all. Whether the algorithm was in fact known or unknown at the time of the
 12 claimed invention, as one of the ‘basic tools of scientific and technological work,’ it is treated as
 13 though it were a familiar part of the prior art.” (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67
 14 (1972))).

15 Second, Disney argues that even if the claims were limited to requiring pixel-wise cross-
 16 correlation algorithms, the Asserted Patents’ representative claims are still patent-ineligible
 17 because mathematical formulas are abstract ideas. However, as Disney itself acknowledges, a
 18 claim that employs a “well-known mathematical equation . . . in a process designed to solve a
 19 technological problem” is patent-eligible. *Alice*, 573 U.S. at 223. Disney asserts that here, “there
 20 is no claimed process beyond the algorithm itself[.]” ECF No. 73 (“Reply”) at 15, but that is
 21 demonstrably not the case—the representative claims recite additional limitations that relate
 22 specifically to techniques in facial motion capture (e.g., rendering 3D animated faces, capturing
 23 2D frames through a plurality of cameras, tracking 3D images in motion). These limitations serve
 24 to restrict the claims to only an application of the pixel-wise cross-correlation algorithm as a
 25 method for solving a specific technological problem—rendering a 3D animated face from 2D
 26 camera captures of a performer’s face. Put another way, the Asserted Patents “employ[] a well-
 27 known mathematical equation, but they do not seek to pre-empt the use of that equation. Rather,
 28 they seek only to foreclose from others the use of that equation in conjunction with all of the other

steps in their claimed process.” *Diehr*, 450 U.S. at 187; *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016) (distinguishing patent-ineligible claim “where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation” with patent-eligible claims “directed to a specific implementation of a solution to a problem in the software arts.”).

Third, Disney argues that, even crediting Rearden’s proposed construction, the representative claims still “fail[] to claim the only alleged improvement in the prior art described in the specification,” Mot. at 18, and “do not recite specific methods of implementing markerless motion capture that the specification contends is an improvement over a prior art (i.e., the use of a painted random pattern.)”. Reply at 15–16. The Court finds this argument unpersuasive. A patent’s specification is not limited to describing only one innovation, and a patentee is entitled to claim multiple innovations so disclosed through multiple patents. At best, Disney’s objections raise a factual dispute as to the scope of the specification’s disclosures, which the Court need not resolve on a motion to dismiss.

Because the Court finds that Rearden’s proposed construction of the terms “correlate”/“correlated” in the Asserted Patents nonfrivolous, and that their adoption would render the representative claims patent-eligible, the Court concludes that it is appropriate to defer ruling on the question of patent eligibility until after claim construction. *See RideApp, Inc. v. Lyft, Inc.*, No. 18-CV-07152-JST, 2019 WL 7834759, at *2 (N.D. Cal. Aug. 15, 2019). The Court need not rule on Rearden’s proposed constructions of other claim terms at this juncture, and denies Disney’s motion to dismiss as to the TAC’s patent infringement claims.

C. Leave to Amend

Finally, the Court considers whether Rearden should have a further opportunity to amend its copyright infringement claim. Disney argues that any further amendment would be futile, in light of Rearden’s failure to plead a viable claim in three previous amendments. Mot. at 32; Reply at 19. Rearden argues that further amendment would not be futile, and that leave to amend should be granted, because “Rearden still has not received documents in DD3’s possession from the Ownership Litigation that could show additional relevant acts of direct infringement.” Opp. at 28.

The decision of whether to grant leave to amend is within the discretion of the district court, which may deny leave to amend “due to ‘undue delay, bad faith or dilatory motive on the part of the [party seeking leave to amend], repeated failure to cure deficiencies by amendments previously allowed, undue prejudice to the opposing party by virtue of allowance of the amendment, [and] futility of amendment.’” *Leadsinger, Inc. v. BMG Music Pub.*, 512 F.3d 522, 532 (9th Cir. 2008) (quoting *Foman v. Davis*, 371 U.S. 178, 182, (1962)). Where, as here, “the plaintiff has previously been granted leave to amend and has subsequently failed to add the requisite particularity to its claims, the district court’s discretion to deny leave to amend is particularly broad.” *Nguyen v. Endologix, Inc.*, 962 F.3d 405, 420 (9th Cir. 2020) (internal quotation omitted).

The Court is not convinced at this juncture that further amendment to Rearden’s copyright infringement claim would be futile. Rearden states, and Disney does not dispute,⁷ that “Rearden still has not received documents in DD3’s possession from the Ownership Litigation that could show additional relevant acts of direct infringement.” Opp. at 28. It also argues that “[t]he Court has never previously addressed the control, knowledge, and financial benefit elements of Rearden’s indirect infringement claims.” *Id.* The Court will therefore grant Rearden one final chance to amend its copyright infringement claim, wherein Rearden “must be willing to make [its] averments without caveat and/or with additional detail explaining the basis of [its] beliefs.” *Vespa v. Singler-Ernster, Inc.*, No. 16-CV-03723-RS, 2016 WL 6637710, at *2 (N.D. Cal. Nov. 8, 2016).

IV. CONCLUSION

For the foregoing reasons, Disney’s motion to dismiss is granted without prejudice as to Rearden’s claim for vicarious and contributory copyright infringement. Disney’s motion is denied as to Rearden’s claims for patent infringement. Rearden may file an amended complaint within twenty-one days of this order solely to cure the deficiencies identified by this order. Failure to do so, or to cure the deficiencies identified in this order, shall result in dismissal with prejudice. If

⁷ Disney does argue that Rearden has received “*many thousands of MOVA files* that contain images and video of studio actors.” Reply at 9–10 (emphasis in original). But it does not contend that DD3’s production is complete.

1 Rearden believes that it needs additional time to obtain further evidence from DD3, it may seek a
2 stipulation, or move for an extension of that deadline.

3 **IT IS SO ORDERED.**

4 Dated: March 21, 2024

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6 JON S. TIGAR
United States District Judge

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United States District Court
Northern District of California